

REMARKS

Claims 1-31 are pending at the time of the Final Office Action. In the Final Office Action transmitted on March 6, 2007, the Examiner took the following action: (1) requested information from the applicants under 37 CFR 1.105; (2) objected to the drawings under 37 CFR §1.83(a); (3) objected to the incorporation by reference of U.S. Application 10/019,459 as ineffective; (4) objected to the amendment filed on February 5, 2007 under 35 U.S.C. §132(a) as introducing new matter into the disclosure; (5) rejected claims 1-24 and 30-31 under 35 U.S.C. §112, first paragraph, as failing to comply with the enablement requirement; (6) rejected claims 9-12 and 17 under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement; (7) rejected claims 17-24 under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention; (8) rejected claim 25 under 35 U.S.C. §102(b) as being anticipated by Lee (U.S. 5,995,681); (9) rejected claims 26-27 under 25 U.S.C. §103(a) as being unpatentable over Lee in view of Ogawa (U.S. 5,864,632); (10) rejected claims 28-29 under 35 U.S.C. §103(a) as being unpatentable over Lee in view of Lindgren (U.S. 6,097,835); (11) rejected claims 1-2 and 9-10 under 35 U.S.C. §103(a) as being unpatentable over Lindgren in view of Fraisse (U.S. 7,171,912); and (12) rejected claims 3, 11, 17, 20-21, 23-24, and 30-31 under 35 U.S.C. §103(a) as unpatentable over Lindgren in view of Fraisse, and in further view of Lee. Applicants amend claims 1, 7, 9-12, 15, 17, 23, 25, and 29-30. Claim 28 is canceled. Claim 32 has been added. Applicants respectfully request entry of the above-proposed amendment, as well as reconsideration of the application in view of the foregoing amendment and the following remarks.

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I. Examiner Interview

Applicants respectfully express their appreciation to Examiner Smith for the telephone interview held on June 29, 2007, during which the Examiner discussed the disposition of this case with the undersigned attorney. During the interview, applicants and the Examiner discussed the Examiner's request for information pertaining to the Landsat-7 Science Data User's Handbook. Applicants and the Examiner also discussed the deletion of the reference to U.S. Patent Application 10/019,459 from the Specification. It is believed that agreement was reached with Examiner Smith that the reference to U.S. Patent Application 10/019,459 may be properly deleted from the Specification. Further, applicants and the Examiner also discussed the rejections of claims 9-12 and 17 under 35 U.S.C. §112, first paragraph. It is believed that agreement was reached with Examiner Smith that the means plus function claim format is proper for claims 9-12 and 17.

II. Requirement for Information

In response to the Examiner's request for the "Landsat-7" documentation, applicants respectfully submit a copy of the solar illumination algorithm from the Landsat-7 Science Data User's Handbook, attached hereto as Exhibit A.

In response to the Examiner's request for information, applicants respectfully submit that no prior art search was performed by the applicants. Specifically, no prior art search was performed by the applicants with respect to the present patent application, U.S. Application 10/611,757 filed on June 20, 2003, or U.S. Application 10/019,459 filed on December 26, 2001, for the claimed solar illumination correction and the claimed atmospheric correction. Additionally, the applicants respectfully submit that the claimed solar illumination correction and the claimed atmospheric correction are not disclosed or claimed in one or more patents or patent

applications filed by the applicants. Applicants acknowledge their continuing duty to disclose information that is material to patentability as defined under 37 CFR 1.56.

III. Objection to the Drawings

The drawings are objected to under 37 CFR §1.83(a). Applicants have amended claims 9-12 and 17 to cancel the structural elements rejected under 35 U.S.C. §112, first paragraph. Accordingly, applicants respectfully request reconsideration and withdrawal of these objections.

IV. Objection to the Specification

The incorporation by reference of U.S. Application 10/019,459 was objected to as being ineffective. Applicants have deleted the reference to U.S. Application 10/019,459 from the specification. It is well established that *the specification need not disclose what is well-known to those skilled in the art* and preferably omits that which is well-known to those skilled and already available to the public. In re Buchner, 929 F.2d 660, 661, 18 USPQ2d 1331, 1332 (Fed. Cir. 1991); *Hybritech, Inc. v. Monoclonal Antibodies, Inc.*, 802 F.2d 1367, 1384, 231 USPQ 81, 94 (Fed. Cir. 1986), cert. denied, 480 U.S. 947 (1987); and *Lindemann Maschinenfabrik GMBH v. American Hoist & Derrick Co.*, 730 F.2d 1452, 1463, 221 USPQ 481, 489 (Fed. Cir. 1984). MPEP 2164.05(a). (emphasis added). Thus, applicants respectfully assert that since the performance of “atmospheric correction” is well known in the art, the specification provides an enabling disclosure without the specific reference to U.S. Application 10/019,459.

Further, claims 9-12 and 17 were objected to as containing new structural elements. Applicants have deleted these elements from claims 9-12 and 17. Accordingly, applicants respectfully request reconsideration and withdrawal of these objections.

V. Rejections under 35 U.S.C. §112

Claims 1-24 and 30-31 are rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the enablement requirement. Specifically, the claims were rejected as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to make and/or use the invention. Applicants have amended the specification to delete the incorporation by reference to U.S. Patent Application 10/019,459. Moreover, Applicants respectfully submit that atmospheric correction of images, such as satellite images, is well known in the art. Thus, the claims 1-24 and 30-31 are enabled.

Additionally, claims 9-12 and 17 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. Applicants have deleted structural elements from claims 9-12 and 17.

Further, claims 17-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctively claim the subject matter which the applicants regard as the invention. Applicants have amended claim 27 to recite "the aligned images" instead of "spatially match images" where appropriate. Accordingly, applicants respectfully request reconsideration and withdrawal of these rejections.

VI. Rejections under 35 U.S.C. §102(b)

Lee (U.S. 5,995,681)

Lee teaches a digital image processing system that reduces errors in the parameters of a sensor geometry model. (1:11-15). Lee teaches the use of a co-registration mechanism to co-registers the reduced accuracy working digital image with a reference image. (2:41-44). The imagery co-registration operator adjusts the respective geometry models associated with the

input images to bring the respective images into effective co-registration on image registration surface. (2:52-59).

Claim 25 is rejected under 35 U.S.C. §102(b) as being anticipated by Lee. Applicants respectfully traverse the rejection, and submit that claim 25 is allowable over the cited reference to Lee. Claim 25, as amended, recites:

25. A user interface for selecting control points on a plurality of multispectral band satellite images from different sources for alignment, the user interface comprising:

- a first component for displaying one of the multispectral band satellite images, wherein the multispectral band satellite images are set to equalized resolution levels;
- a second component for selecting a landmark from a database of landmarks located within a geographic area common to the plurality of multispectral band satellite images;
- a third component for adjusting the displayed multispectral band satellite image to present the selected landmark; and
- a fourth component for selecting a control point associated with a visual feature that is approximately adjacent to the selected landmark.

Applicants respectfully assert that claim 25 is patentable over Lee. Specifically, Lee does not teach or suggest, “a first component for displaying one of the *multispectral band satellite images*, wherein the *multispectral band satellite images* are set to equalized resolution levels,” as recited in claim 25. (emphasis added).

In contrast, Lee discloses a display device 25 that displays satellite images. (1:52-56). However, Lee is silent on the type of satellite image displayed. Specifically, Lee does not teach or suggest the display of multispectral band satellite images that are set to equalized resolution levels. Accordingly, claim 25 is allowable over Lee.

VII. Rejections under 35 U.S.C. §103(a)

Claims 26-27 are rejected under 35 U.S.C. §103(a) as being unpatentable over Lee in view of Ogawa. Claims 28-29 are rejected under 35 U.S.C. §103(a) as being unpatentable over Lee in view of Lindgren. Claims 1-2 and 9-10 are rejected under 35 U.S.C. §103(a) as being unpatentable over Lindgren in view of Fraisse. Claims 3, 11, 17, 20-21, 23-24, and 30-31 are rejected under 35 U.S.C. §103(a) as unpatentable over Lindgren in view of Fraisse, and in further view of Lee. Claims 4-8, 12-16, 18-19, and 22 are rejected under 35 U.S.C. §103(a) as being unpatentable over Lindgren in view of Fraisse and Lee, and in further view of Ogawa. Applicants respectfully traverse the rejections, and submit that claims are allowable over the cited references.

Ogawa (U.S. 5,864,632)

Ogawa teaches a map editing device that is capable of supplementing insufficient information and re-measuring an object that has changed. (1:64-66). The map editing device generates and displays a perspective projection map when a user manually changes the projection center and the projection angle. (2:33-39). The map editing is also capable of supplementing insufficient information based on the projection center and the projection angle. (2:39-50).

Lindgren (U.S. 6,097,835)

Lindgren teaches projective panchromatic sharpening method and apparatus that combine registered high spatial resolution panchromatic imagery and lower spatial resolution multispectral imagery to synthesize higher spatial resolution multispectral imagery. (1:61-64). The projective panchromatic sharpening apparatus comprises a first component that determines

the linear radiometric relationship between the panchromatic and multispectral bands, and a second component that processes pixels to produce the sharpened product. (2:1-8).

Fraisie (U.S. 7,171,912)

Fraisie teaches a map for fertilizer application that is created using a map of site-specific amounts of the soil nutrient needed to produce the maximum possible yield at the particular site. (3:1-4). Specifically, nutrient currently existing in a field are subtracted from the site-specific amounts of nutrient needed, thus producing a map of site-specific nutrient amounts to be added. (3:5-15).

Claims 26-27

Claims 26-27 are rejected under 35 U.S.C. §103(a) as being unpatentable over Lee in view of Ogawa. Claims 26-27 depend from claim 25. Claim 25, as amended, recites:

25. A user interface for selecting control points on a plurality of multispectral band satellite images from different sources for alignment, the user interface comprising:
- a first component for displaying one of the multispectral band satellite images, wherein the multispectral band satellite images are set to equalized resolution levels;
 - a second component for selecting a landmark from a database of landmarks located within a geographic area common to the plurality of multispectral band satellite images;
 - a third component for adjusting the displayed multispectral band satellite image to present the selected landmark; and
 - a fourth component for selecting a control point associated with a visual feature that is approximately adjacent to the selected landmark.

First, applicants respectfully incorporate the arguments presented above in response to the rejection of claim 25 under 35 U.S.C. §102(b) by analogy, and assert that Lee does not teach or suggest, “a first component for displaying one of the *multispectral band satellite images*,

wherein the *multispectral band satellite images are set to equalized resolution levels*,” as recited in claim 25. (emphasis added).

Second, applicants respectfully submit that the deficiencies of Lee are not remedied by Ogawa. Ogawa teaches analyzing visual features such as fields and buildings by edge detection and tracing. (6:30-38). However, Ogawa does not teach or suggest analyzing multispectral band satellite images. Thus, Ogawa cannot teach or suggest, “a first component for displaying one of the *multispectral band satellite images*, wherein the *multispectral band satellite images are set to equalized resolution levels*,” as recited in claim 25. (emphasis added).

Furthermore, since claims 26-27 depend from claim 25, they are at least allowable for the same reason that makes claim 25 allowable over the cited references, as well as for additional limitations recited.

Claims 28-29

Claims 28-29 are rejected under §35 U.S.C. 103(a) as being unpatentable over Lee in view of Lindgren. Claims 28-29 depend from claim 25. Claim 28 is canceled. Claim 25, as amended, recites:

25. A user interface for selecting control points on a plurality of multispectral band satellite images from different sources for alignment, the user interface comprising:

- a first component for displaying one of the multispectral band satellite images, wherein the multispectral band satellite images are set to equalized resolution levels;
- a second component for selecting a landmark from a database of landmarks located within a geographic area common to the plurality of multispectral band satellite images;
- a third component for adjusting the displayed multispectral band satellite image to present the selected landmark; and
- a fourth component for selecting a control point associated with a visual feature that is approximately adjacent to the selected landmark.

First, applicants respectfully incorporate the arguments presented above in response to the rejection of claim 25 under 35 U.S.C. §102(b) by analogy, and assert that Lee does not teach or suggest, “a first component for displaying one of the *multispectral band satellite images*, wherein the *multispectral band satellite images are set to equalized resolution levels*,” as recited in claim 25. (emphasis added).

Second, applicants respectfully submit that the deficiencies of Lee are not remedied by Lindgren. In contrast, Lindgren discloses matching a “high spatial resolution *panchromatic* imagery” with a “lower spatial resolution *multispectral* imagery” to synthesize a higher resolution multispectral imagery. (emphasis added). (1:20-25). In other words, since Lindgren specifically discloses the combination of a *panchromatic* imagery with a *multispectral* imagery, Lindgren does not teach combining a plurality of multispectral band images.

As a result, Lindgren also cannot teach or suggest, a first component for displaying one of the *multispectral band satellite images*, wherein the *multispectral band satellite images are set to equalized resolution levels*,” as recited in claim 25. (emphasis added).

Furthermore, since claim 29 depends from claim 25, it is at least allowable for the same reason that makes claim 25 allowable over the cited references, as well as for additional limitations recited.

Claims 1-2

Claims 1-2 are rejected under 35 U.S.C. §103(a) as being unpatentable over Lindgren in view of Fraisse, Claim 2 depends from claim 1. Claim 1, as amended, recites:

1. A method for correlating data from multispectral band images produced by different sensors, the method comprising:
spatially matching a plurality of multispectral band images produced by different sensors, the multispectral band images having different resolution levels;
performing at least one of a solar illumination correction and an atmospheric correction on the spatially matched images; and

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spectrally correcting one or more of the spatially matched images based on one or more of the other images.

Applicants respectfully assert that claim 1 is patentable over the cited reference to Lindgren and Fraisse. First, Lindgren does not teach or suggest, "spatially matching *a plurality of multispectral band images* produced by different sensors, the multispectral band images having different resolution levels."

In contrast, Lindgren discloses matching a "high spatial resolution *panchromatic* imagery" with a "lower spatial resolution *multispectral* imagery" to synthesize a higher resolution multispectral imagery. (emphasis added). (1:20-25). In other words, since Lindgren specifically discloses the combination of a *panchromatic* imagery with a *multispectral* imagery, Lindgren does not teach spatially matching a *plurality* of multispectral band images.

Second, the deficiencies of the Lindgren are not remedied by Fraisse. Fraisse teaches making atmospheric corrections to satellite images. (7:4-22). However, Fraisse does not teach or suggest, "spatially matching *a plurality of multispectral band images* produced by different sensors," as recited in claim 1.

Accordingly, the cited references to Lindgren and Fraisse, whether individually or in combination, do not teach, disclose or fairly suggest the system recited in claim 1. Furthermore, since claim 2 depends from claim 1, it is at least allowable for the same reason that makes claim 1 allowable over the cited references, as well as for additional limitations recited.

Claims 9-10

Claims 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lindgren in view of Fraisse. Claim 10 depends from claim 9. Claim 9, as amended, recites:

9. A system for correlating data from two or more satellite images from different sensors, the system comprising:
means for spatially matching a plurality of multispectral band satellite images produced by different sensors;

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means for performing a solar illumination correction on the spatially matched satellite images; and
means for spectrally correcting one or more of the spatially matched satellite images based on one or more of the other satellite images.

Applicants respectfully assert that claim 9 is patentable over the cited reference to Lindgren and Fraisse. First, applicants respectfully incorporate the arguments presented above in response to the rejection of claim 1 under 35 U.S.C. §103(a) by analogy, and assert that the cited references to Lindgren and Fraisse, whether individually or in combination, do not teach, disclose or fairly suggest, “means for spatially matching a plurality of *multispectral band satellite images* produced by different sensors,” as recited in claim 9. (emphasis added).

Second, as noted by the Examiner, Lindgren does not teach or suggest, “means for performing a *solar illumination correction* on the spatially matched satellite images.” (emphasis added). (Office Action, Page 9, Lines 5-6 and 15-17). Moreover, the deficiencies of Lindgren are not remedied by Fraisse. Fraisse teaches making atmospheric corrections to satellite images. (7:4-22). However, Fraisse does not teach or suggest the solar illumination correction of satellite images.

Accordingly, the cited references to Lindgren and Fraisse, whether individually or in combination, do not teach, disclose or fairly suggest the system recited in claim 9. Furthermore, since claim 10 depends from claim 9, it is at least allowable for the same reason that makes claim 10 allowable over the cited references, as well as for additional limitations recited.

Claim 3

Claim 3 is rejected under 35 U.S.C. §103(a) as being unpatentable over Lindgren in view of Fraisse, and in further view of Lee. Claim 3 depends from claim 1. Claim 1, as amended, recites:

1. A method for correlating data from multispectral band images produced by different sensors, the method comprising:

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spatially matching a plurality of multispectral band images produced by different sensors, the multispectral band images having different resolution levels;
performing at least one of a solar illumination correction and an atmospheric correction on the spatially matched images; and
spectrally correcting one or more of the spatially matched images based on one or more of the other images.

First, applicants respectfully incorporate the arguments presented above in response to the rejection of claim 1 under 35 U.S.C. §103(a) by analogy, and assert that the cited references to Lindgren and Fraisse, whether individually or in combination, do not teach, disclose or fairly suggest, “spatially matching *a plurality of multispectral band images* produced by different sensors, the multispectral band images having different resolution levels,” as recited in claim 1. (emphasis added).

Second, applicants respectfully submit that the deficiencies of Lindgren are also not remedied by Lee. As noted by the Examiner, Lee disclose setting a plurality of control points in the images based on landmark information and aligning images based on the set control points. (Office Action, Page 10, Lines 8-10, Lee, Figure 1). However, Lee also does not disclose, teach or fairly suggest, “spatially matching *a plurality of multispectral band images* produced by different sensors, the multispectral band images having different resolution level,” as recited in claim 1. (emphasis added).

Accordingly, the cited references (Lindgren, Fraisse, and Lee), whether individually or in combination, do not teach, disclose or fairly suggest the system recited in claim 1. Furthermore, since claim 3 depends from claim 1, it is at least allowable for the same reason that makes claim 1 allowable over the cited references, as well as for additional limitations recited.

Claim 11

Claim 11 is rejected under 35 U.S.C. §103(a) as being unpatentable over Lindgren in view of Fraisse, and in further view of Lee. Claim 11 depends from claim 9. Claim 9, as amended, recites:

9. A system for correlating data from two or more satellite images from different sensors, the system comprising:
means for spatially matching a plurality of multispectral band satellite images produced by different sensors;
means for performing a solar illumination correction on the spatially matched satellite images; and
means for spectrally correcting one or more of the spatially matched satellite images based on one or more of the other satellite images.

First, applicants respectfully incorporate the arguments presented above in response to the rejection of claim 3 under 35 U.S.C. §103(a) by analogy. Accordingly, applicants assert that the cited references to Lindgren, Fraisse, and Lee, whether individually or in combination, do not teach, disclose or fairly suggest, “means for spatially matching *a plurality of multispectral band satellite images* produced by different sensors,” as recited in claim 9. (emphasis added).

Second, applicants further respectfully incorporate the second argument presented above in response to the rejection of claim 9 under 35 U.S.C. §103(a) by analogy. Accordingly, applicants assert, that the cited references to Lindgren and Fraisse, whether individually or in combination, also do not teach, disclose or fairly suggest, “means for performing *a solar illumination correction* on the spatially matched satellite images,” as recited in claim 9. (emphasis added).

Moreover, the deficiencies of Lindgren are not remedied by Lee. Lee discloses a display device 25 that displays satellite images. (1:52-56). However, Fraisse and Lee do not teach, “means for performing *a solar illumination correction* on the spatially matched satellite images,” as recited in claim 9. (emphasis added).

Accordingly, the cited references (Lindgren, Fraisse, and Lee), whether individually or in combination, do not teach, disclose or fairly suggest the system recited in claim 9. Furthermore, since claim 11 depends from claim 9, it is at least allowable for the same reason that makes claim 9 allowable over the cited references, as well as for additional limitations recited.

Claim 17, 20-21, and 23-24

Claims 17, 20-21, and 23-34 are rejected under 35 U.S.C. §103(a) as being unpatentable over Lindgren in view of Fraisse, and in further view of Lee. Claims 20-21 and 23-24 depend from claim 17. Claim 17, as amended, recites:

17. A system for correlating a plurality of satellite images from different sources, the system comprising:
- a user interface device;
 - a display device;
 - a database for storing landmark information; and
 - a processor coupled to the user interface device, the display device, and the database, the processor including:
 - means for instructing the display device to present one of the satellite images based on the stored landmark information;
 - means for setting control points in the satellite images based on a signal generated by the user interface;
 - means for aligning the images based on the set control points;
 - means for performing a solar illumination correction on the aligned images; and
 - means for spectrally correcting one or more of the aligned images based on one or more of the other images.

Applicants respectfully incorporate the second argument presented above in response to the rejection of claim 11 under 35 U.S.C. §103(a) by analogy, and assert that the cited references to Lindgren, Fraisse, and Lee, whether individually or in combination, do not teach, disclose or fairly suggest, “means for performing a *solar illumination correction* on the aligned images,” as recited in claim 17. (emphasis added).

Accordingly, the cited references (Lindgren, Fraisse, and Lee), whether individually or in combination, do not teach, disclose or fairly suggest the system recited in claim 17. Furthermore, since claims 20-21 and 23-24 depend from claim 17, they are at least allowable for the same reason that makes claim 17 allowable over the cited references, as well as for additional limitations recited.

Specifically, claim 23 is further allowable over the cited references to Lindgren, Fraisse, and Lee. Claim 23, as amended, recites:

23. The system of Claim 17, wherein the multispectral band satellite images include multispectral satellite images of different resolution levels, wherein the processor further includes a means configured to set the multispectral band satellite images to equalized resolution levels.

First, Lindgren does not teach or suggest, “a means configured to set the *multispectral band satellite images* to equalized resolution levels,” as recited in claim 23. (emphasis added). Instead, Lindgren discloses matching a “high spatial resolution *panchromatic* imagery” with a “lower spatial resolution *multispectral* imagery” to synthesize a higher resolution multispectral imagery. (emphasis added). (1:20-25). In other words, since Lindgren specifically discloses the combination of a *panchromatic* imagery with a *multispectral* imagery, Lindgren does not teach spatially matching a plurality of multispectral band images.

Moreover, the deficiencies of Lindgren are not remedied by the Fraisse and Lee. Fraisse teaches making atmospheric corrections to satellite images. (7:4-22). Lee discloses a display device 25 that displays satellite images. (1:52-56). However, Fraisse and Lee do not teach, “a means configured to set the *multispectral band satellite images* to equalized resolution levels,” as recited in claim 23. (emphasis added). Accordingly, the cited reference to Lindgren, Fraisse, and Lee, whether individually or in combination, do not teach, disclose, or fairly suggest the system recited in claim 23.

Claims 30-31

Claims 30-31 are rejected under 35 U.S.C. §103(a) as being unpatentable over Lindgren in view of Fraisse, and in view of Lee. Claim 31 depends from claim 30. Claim 30, as amended, recites:

30. A method for correlating data from multispectral band images produced by different sensors, the method comprising:
spatially matching a plurality of multispectral band images produced by different sensors;
setting a plurality of control points in the images based on landmark information; and
spectrally correcting one or more of the spatially matched images based on spectral information associated with one or more of the set control points in the images.

Applicants respectfully incorporate the arguments presented above in response to the rejection of claim 3 under 35 U.S.C. §103(a) by analogy, and assert that the cited references to Lindgren, Fraisse, and Lee, whether individually or in combination, do not teach, disclose or fairly suggest, “spatially matching *a plurality of multispectral band images* produced by different sensors,” as recited in claim 30. (emphasis added).

Accordingly, the cited references (Lindgren, Fraisse, and Lee), whether individually or in combination, do not teach, disclose or fairly suggest the system recited in claim 30. Furthermore, since claim 31 depends from claim 30, it is at least allowable for the same reason that makes claim 30 allowable over the cited references, as well as for additional limitations recited.

Claim 4-8

Claims 4-8 are rejected under 35 U.S.C. §103(a) as being unpatentable over Lindgren in view of Fraisse and Lee, and in further view of Ogawa. Claims 4-8 depend from claim 1. Claim 1, as amended, recites:

1. A method for correlating data from multispectral band images produced by different sensors, the method comprising:

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spatially matching a plurality of multispectral band images produced by different sensors, the multispectral band images having different resolution levels;
performing at least one of a solar illumination correction and an atmospheric correction on the spatially matched images; and
spectrally correcting one or more of the spatially matched images based on one or more of the other images.

First, Applicants respectfully incorporate the arguments presented above in response to the rejection of claim 3 under 35 U.S.C. §103(a) by analogy, and assert that the cited references to Lindgren, Fraisse, and Lee, whether individually or in combination, do not teach, disclose or fairly suggest, “spatially matching *a plurality of multispectral band images* produced by different sensors, the multispectral band images having different resolution levels,” as recited in claim 1. (emphasis added).

Moreover, the deficiencies of Lindgren are not remedied by the Ogawa. Ogawa teaches a means for extracting ground control points from tracing the images of objects such as roads, buildings, fields, and woods. (6:30-38). However, Ogawa does not teach, “spatially matching *a plurality of multispectral band images* produced by different sensors, the multispectral band images having different resolution levels,” as recited in claim 1. (emphasis added). Accordingly, the cited references (Lindgren, Fraisse, Lee, and Ogawa), whether individually or in combination, do not teach, disclose, or fairly suggest the system recited in claim 1.

Furthermore, since claims 4-8 depend from claim 1, they are at least allowable for the same reason that makes claim 1 allowable over the cited references, as well as for additional limitations recited.

Claims 12-16

Claims 12-16 are rejected under 35 U.S.C. §103(a) as being unpatentable over Lindgren in view of Fraisse and Lee, and in further view of Ogawa. Claims 12-16 depend from claim 9. Claim 9, as amended, recites:

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9. A system for correlating data from two or more satellite images from different sensors, the system comprising:
means for spatially matching a plurality of multispectral band satellite images produced by different sensors;
means for performing a solar illumination correction on the spatially matched satellite images; and
means for spectrally correcting one or more of the spatially matched satellite images based on one or more of the other satellite images.

First, applicants respectfully incorporate the arguments presented above in response to the rejection of claim 11 under 35 U.S.C. §103(a) by analogy. Accordingly, applicants assert that the cited references to Lindgren, Fraisse, and Lee, whether individually or in combination, do not teach, disclose or fairly suggest, “means for spatially matching *a plurality of multispectral band satellite images* produced by different sensors,” as recited in claim 11. (emphasis added). Moreover, the deficiencies of Lindgren with respect to this limitation are not remedied by the Ogawa. Ogawa teaches a means for extracting ground control points from tracing the images of objects such as roads, buildings, fields, and woods. (6:30-38).

Second, applicants further assert, based on the incorporated arguments, that the cited references to Lindgren, Fraisse, and Lee, whether individually or in combination, also do not teach, disclose or fairly suggest, “means for performing *a solar illumination correction* on the spatially matched satellite images,” as recited in claim 9. (emphasis added).

Further, the deficiencies of Lindgren with respect to this limitation are not remedied by the Ogawa. As noted above, Ogawa teaches a means for extracting ground control points from tracing the images of objects such as roads, buildings, fields, and woods. (6:30-38).

Accordingly, the cited references (Lindgren, Fraisse, Lee, and Ogawa), whether individually or in combination, do not teach, disclose, or fairly suggest the system recited in claim 9. Furthermore, since claims 12-16 depend from claim 9, they are at least allowable for the same reason that makes claim 9 allowable over the cited references, as well as for additional limitations recited.

Claims 18-19 and 22

Claims 18-19 and 22 are rejected under 35 U.S.C. §103(a) as being unpatentable over Lindgren in view of Fraisse and Lee, and in further view of Ogawa. Claims 18-19 and 22 depend from claim 17. Claim 17, as amended, recites:

17. A system for correlating a plurality of satellite images from different sources, the system comprising:
- a user interface device;
 - a display device;
 - a database for storing landmark information; and
 - a processor coupled to the user interface device, the display device, and the database, the processor including:
 - means for instructing the display device to present one of the satellite images based on the stored landmark information;
 - means for setting control points in the satellite images based on a signal generated by the user interface;
 - means for aligning the images based on the set control points;
 - means for performing a solar illumination correction on the aligned images; and
 - means for spectrally correcting one or more of the aligned images based on one or more of the other images.

Applicants respectfully incorporate the second argument presented above in response to the rejection of claim 17 under 35 U.S.C. §103(a) by analogy, and assert that the cited references to Lindgren, Fraisse, and Lee, whether individually or in combination, do not teach, disclose or fairly suggest, “means for performing a *solar illumination correction* on the aligned images,” as recited in claim 17. (emphasis added).

Further, the deficiencies of Lindgren with respect to this limitation are not remedied by the Ogawa. As noted above, Ogawa teaches a means for extracting ground control points from tracing the images of objects such as roads, buildings, fields, and woods. (6:30-38).

Accordingly, the cited references (Lindgren, Fraisse, Lee, and Ogawa), whether individually or in combination, do not teach, disclose, or fairly suggest the system recited in

claim 17. Furthermore, since claims 18-19 and 22 depend from claim 17, they are at least allowable for the same reason that makes claim 17 allowable over the cited references, as well as for additional limitations recited.

VIII. New Claim

Claim 32 is newly added. Claim 32 depends from and applies additional limitations to claim 30. Accordingly, claim 32 is allowable for at least the same reasons that claim 30 is allowable, as well for additional limitations recited in the claim.

CONCLUSION

Applicants respectfully request that the above-proposed amendments be entered and that pending claims 1-27 and 29-32 be allowed. If there are any remaining matters that may be handled by telephone conference, the Examiner is kindly invited to contact the undersigned attorney at the telephone number listed below.

Respectfully Submitted,

Dated: 7-3-07

By: 

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Enclosures:

Exhibit A: "Landsat-7" Document

60483

CUSTOMER NUMBER